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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/766,101
Filing Date: January 28, 2004
Appellant(s): PARK ET AL.

Mark B Garred
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 29, 2008 appealing from the Office action mailed September 11, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,988.668	Osako et al.	6-2006
6,145,023	Iwasaki	11-2000

6,417,444	Hirai et al.	7-2002
5,244,840	Kodai et al.	9-1993

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 6-12, and 16-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Osako et al. ('668 B2, as in the record).

As to claims 1, 11, and 20, Osako et al. discloses a memory card (1) and its method as shown in figures 1-2 comprising:

a substrate (5) having opposed top and bottom surfaces and a plurality of terminals (6-figure 1) disposed on the bottom surface thereof; at least one component (7) mounted to the top surface of the substrate (5) and electrically connected to the terminals thereof;

a first encapsulation part (3, see figure 1) formed on the bottom surface of the substrate; and

a second encapsulation part (8, see figure 3) formed on the top surface of the substrate (5) and encapsulating the component (7) mounted thereto, the second encapsulation part (8) being completely separated from the first encapsulation part (3) by the substrate (5); the first and second encapsulation parts (3, 8) each being exposed in the memory card (noted: the element 8 is molded on the surface of the substrate 5).

As to claims 21-22, Osako et al. discloses a memory card (1) and its method as shown in figures 1-2 comprising: a substrate (5) having opposed top and bottom surfaces and a plurality of terminals (6-figure 1) disposed on the bottom surface thereof; at least one component (7) mounted to the top surface of the substrate (5) and electrically connected to the terminals thereof; a first encapsulation part (3) formed on the bottom surface of the substrate; and a second encapsulation part (8) formed on the top surface of the substrate (5) and encapsulating the component (7) mounted thereto, the second encapsulation part being completely separated from the first encapsulation part; the first and second encapsulation parts (3, 8) each being exposed in the memory card (noted: the elements 3 and 8 are encapsulated and exposed on the top and bottom surfaces in the memory card), and Osako et al. as shown in figure 2 having the first encapsulation part (3) is of a first thickness; and the second encapsulation part (8) is of a second thickness which exceeds the first thickness.

As to claims 2, 12, Osako et al. discloses the first encapsulation part (3) formed to include an opening where the terminals (6) of the substrate being exposed in the opening, see figure 1.

As to claims 6, 16, Osako et al. discloses the first and second encapsulation parts (3,8) are each fabricated from an epoxy mold compound, see column 5, lines 15-34.

As to claims 7, 17, Osako et al. as shown in figure 2 having the first encapsulation part (3) is of a first thickness; and the second encapsulation part (8) is of a second thickness which exceeds the first thickness.

As to claims 8-10, and 18-19, Osako et al. discloses a multiple components (column 4, lines 62-64), the components being selected one of a semiconductor package or die having wire bonded, a passive component; and combinations thereof.

As to claim 23, Osako et al. discloses the first and second encapsulation parts (3, 8) are configured to impart a prescribed form factor to the memory card.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-4 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osako et al. in view of Hirai et al. (U.S. Patent 6,417,444).

As to claims 3 and 13, Osako discloses all of the limitations of the claimed invention, except for a pair of coupling notches formed in respective ones of the sides of the second encapsulation part in opposed relation to each other.

Hirai et al. shows a CF card as shown in figure 3a-3b comprising a bottom cover (1a) having a molding frame (2), the frame having a pair of coupling notches (2a, 2b, column 3) formed in respective ones of the sides of the molding frame (2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a pair of coupling notches formed in respective ones of the sides of a card as taught by Hirai et al. modified the second encapsulation part (2, 8) of Osako in order to provide a hook-like engagement.

As to claims 4 and 14, Osako discloses all of the limitations of the claimed invention except for a pair of guide slots formed in respective ones of peripheral edge segments.

Hirai et al. shows a CF card as shown in figure 3a-3b comprising a bottom cover (1a) having a molding frame (2), the frame having a pair of guide slots (7, column 3) formed in respective ones of the sides of the molding frame (2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a pair of guide slots formed in respective ones of the sides of a card as taught by Hirai et al. modified the second encapsulation part (2, 8) of Osako in order to provide a hook-like engagement.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osako et al. in view of Kodai et al. (U.S. Patent 5,244,840).

Regarding claim 24, Osako et al. discloses all of the limitations of the claimed invention, except for the first encapsulation part being sized and cover entirety of the top surface of the substrate.

Kodai et al. shows an IC card as shown in figure 16B having a resin molding (14), the first part of the molding (14) having sized and cover the entirety of the top surface of the card.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Kodai et al. modified the first encapsulation part (3) of Osako in order to protect the card from external impact.

Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Osako et al. in view of Iwasaki (U.S. Patent 6,145,023).

Regarding claims 5 and 15, Osako et al. does disclose all of the limitation of the claimed invention, except for the second encapsulation part edge segment of the second includes a recess formed therein adjacent a peripheral encapsulation part disposed furthest from the terminals.

Iwasaki shows a memory module as shown in figures 1A-1B comprising a support portion (12) having a recess (14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Iwasaki modified the second encapsulation part (2, 8) of Osako in order to provide a handle part for insertion and removal of the card.

(10) Response to Argument

Appellant argues:

Osako does not disclose “the first and second encapsulated being completely separated and exposed in the memory card.

After carefully review with respected from the last Office action mailed on September 11, 2007, Examiner disagrees because:

as shown in figures 1-3 of Osako reference, the IC or memory card (1) comprising an IC body (4) having a substrate (5) fitted or mounted on a dent or recess portion (2a) of a case (2), see column 5, lines 66-67. The substrate (5) of the IC/memory card body (4) having the first sealing portion (3) molded or encapsulated on the bottom surface (see figures 1 and 2), and the second sealing portion (8) molded or encapsulated on the top surface (see figures 2 and 3). The first and second sealing portions (3 and 8) being completely separated from each other by the substrate (5) of the IC card/memory body (4), see figure 2.

The case (2) is an external part and integrally formed with the IC card body (4), see column 5, lines 13-15, which is used to prevent injuries upon handling the body. The case (2) acts as a cover and separately from the IC card body (4) of the IC/memory card, further, figures 16-18 show the IC card body (4) mounted or fitted on the recess of the case (2). Therefore, the case (2) and IC card body (4) are separated parts. Since, the two sealing portions (3 and 8) completely separated by the substrate (5) of the IC card body (4) and also, they (the first and second sealing portion (3 and 8) being exposed on the surfaces (top and bottom surfaces) of the substrate or IC card body (4)

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of the IC or memory card. Thus, Osako discloses all the limitations of the claimed invention (for example, claims 1, 11, and 20-22). Therefore, Osako is proper to anticipated all of the limitations of the claims (claims 1, 11, and 20-22).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Tuan T Dinh/

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